

**Faculty of Computers & Information Technology**

**Parallel Processing**

**Information :**

**Course Code :** CSC 418

**Level :** Undergraduate

**Course Hours :** 3.00- Hours

**Department :** Department of Computer Science

**Description :**

Interconnection networks: parallel computing and networks, direct and indirect networks, message switching layer, deadlock and live lock and starvation, routing algorithms, collective communication support. Parallel algorithms: BRAM model, basic techniques (balanced tree algorithm, divide and conquer, prefix computations, pointer jumping, partitioning), list and trees (list ranking, symmetry breaking, Euler tour techniques), searching, merging, and sorting algorithms

